*Mid- Unit 6 Review*

**Use the expression below to answer questions 1-4.**

**2x + 6y + 4 + x**

1. What is an example of a *coefficient* in the expression above? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. What is an example of a *term* in the expression above? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. What is an example of a variable in the expression above? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. What is an example of a constant in the expression above? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Translate the following words into algebraic expressions.**

1. *the quotient of g and 9* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. *the difference of 3 and y* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. *8 times the quantity x plus 4* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. *7 less than double a number p* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Translate the following algebraic expressions into words.**

1. y – 7 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. 5(x - 4) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. m ÷ 16 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. (s + 10) - 8 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Evaluate:**

1. Evaluate the expression 5(*x* + 8) + *x* + *y*, given that *x* = 3 and *y* = 30 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Evaluate the expression 5(*x* + 2) + *x2* + y, given that *x* = 5 and *y* = 8 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Write and evaluate the expressions:**

1. The formula for the perimeter of rectangle is . The length of the rectangle is 5 units longer than the width. Write an algebraic expression that can be used to find the perimeter of the rectangle. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. What is the perimeter of the rectangle in Question 5 if the length is 12 cm?
3. You have decided to treat yourself and two friends to ice cream. Now, you need to decide if you are going to get ice cream from “Scoops” Ice Cream Shop or “Cold Treats” Ice Cream Shop.

***“Scoops” has one cone of ice cream for $3 and each topping is $1***

***“Cold Treats” has one cone of ice cream for $2 and each topping is $1.50***

1. Write an expression for the cost of an ice cream cone and “*t*” number of toppings at both shops.

Scoops \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Cold Treats \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. If you and your two friends all want to get an ice cream cone and 3 toppings, which shop will be the least expensive? How do you know?

Least expensive: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Explanation:

1. What questions do you still have and want to discuss before taking the quiz?